

**In the Claims:**

Please amend claim 7 as set forth in the "Listing of Claims" below.

Please add new claims 14 and 15 as set forth in the Listing of Claims below.

**LISTING OF CLAIMS**

Claim 1 (Previously Presented): A method of etching, by a plasma of an etching gas in a processing vessel, a lower layer film of an organic material formed on a substrate, using an upper layer film of an Si-containing organic material as a mask, wherein

a mixed gas containing an  $\text{NH}_3$  gas and an  $\text{O}_2$  gas is supplied into the processing vessel as the etching gas,

a CD shift value of etching is controlled by adjusting a flow ratio of the  $\text{O}_2$  gas to the  $\text{NH}_3$  gas,

the plasma is formed between a pair of opposed electrodes disposed in the processing vessel, and

a residence time represented by  $V/S$  takes a value from 20 to 60 msec, where  $V$  ( $\text{m}^3$ ) represents an effective processing space volume as a product of an area of the substrate and a distance between the electrodes, and  $S$  ( $\text{m}^3/\text{sec}$ ) represents a gas exhaust velocity from the processing vessel.

Claim 2 (Original): The etching method according to claim 1, wherein a pressure in the processing vessel is not less than 2.7 Pa and less than 13.3 Pa.

Claim 3 (Previously Presented): The etching method according to claim 1, wherein a pressure in the processing vessel is not less than 6.7 Pa and less than 13.3 Pa.

Claim 4 (Previously Presented): The etching method according to claim 1, wherein a temperature of a support member supporting the substrate in the processing vessel is from 0 to  $20^\circ\text{C}$ .

Claim 5 (Original): The etching method according to claim 1, wherein the substrate has a surface layer to be etched with the lower layer film used as a mask, the surface layer being formed under the lower layer film.

Claim 6 (Original): The etching method according to claim 1, wherein the etching method is carried out by a capacitively coupled plasma etching system, which forms a high-frequency electric field between a pair of opposed electrodes disposed in the processing vessel to generate the plasma.

Claim 7 (Currently Amended): A method of etching, by a plasma of an etching gas in a processing vessel, a lower layer film of an organic material formed on a substrate, using an upper layer film of an Si-containing organic material as a mask, wherein

a mixed gas containing an  $\text{NH}_3$  gas and an  $\text{O}_2$  gas is supplied into the processing vessel as the etching gas,

a flow ratio of the  $\text{O}_2$  gas to the  $\text{NH}_3$  gas is from 0.5 to 20%,

the plasma is formed between a pair of opposed electrodes disposed in the processing vessel, and

a residence time represented by  $V/S$  takes a value from 20 to 60 msec, where  $V$  ( $\text{m}^3$ ) represents an effective processing space volume as a product of an area of the substrate and a distance between the ~~electrode~~ electrodes, and  $S$  ( $\text{m}^3/\text{sec}$ ) represents a gas exhaust velocity from the processing vessel.

Claim 8 (Original): The etching method according to claim 7, wherein the flow ratio of the  $\text{O}_2$  gas to the  $\text{NH}_3$  gas is from 5 to 10%.

Claim 9 (Original): The etching method according to claim 7, wherein a pressure in the processing vessel is not less than 2.7 Pa and less than 13.3 Pa.

Claim 10 (Previously Presented): The etching method according to claim 7, wherein a pressure in the processing vessel is not less than 6.7 Pa and less than 13.3 Pa.

Claim 11 (Previously Presented): The etching method according to claim 7, wherein a temperature of a support member supporting the substrate in the processing vessel is from 0 to 20°C.

Claim 12 (Original): The etching method according to claim 7, wherein the substrate has a surface layer to be etched with the lower layer film used as a mask, the surface layer being formed under the lower layer film.

Claim 13 (Original): The etching method according to claim 7, wherein the etching method is carried out by a capacitively coupled plasma etching system, which forms a high-frequency electric field between a pair of opposed electrodes disposed in the processing vessel to generate the plasma.

Claim 14 (New): The etching method according to claim 6, wherein the distance between the electrodes is such that a distance between a first of said electrodes and a wafer disposed on a second of said electrodes is from 30 to 90 mm.

Claim 15 (New): The etching method according to claim 13, wherein the distance between the electrodes is such that a distance between a first of said electrodes and a wafer disposed on a second of said electrodes is from 30 to 90 mm.